

Claims

1. Process for the correction of the longitudinal registration error of a rotary printing press with several inking systems (1 – 9) in which a control unit adjusts the desired application line (D) of the printing plate on the material web lying on one of the two rollers by controlling the drive or drives of the two rollers (11, K_n) directly involved in the printing process of an inking system, so that the two rollers have, at least during a period of time, a different circumferential speed,
characterized in that
 the control unit takes into account the shift (A) of the actual, effective print line on the circumference of both rollers (11, K_n) in the correction,
 which arises as a consequence of an adjustment movement of one of the two rollers involved in the printing process along an axis (BA_n) that does not run parallel to the connecting line (S_n) of the axes of rotation (M_n , M_{11}) of the two rollers involved in the printing process,
 by the control unit determining correction values from the relative position of the two rollers (11, K_n), directly involved in the printing process, of an inking system (N) and the angle (α) between the connecting line (S_n) of the axes of rotation of the two rollers involved in the printing process and the axis of adjustment (BA_n).

2. Process according to Claim 1,
characterized in that,
 in the determination of the correction values, the control unit accesses correction values on a storage device in which the correction values are plotted as a function of the relative roller position.

3. Process according to Claim 1 or 2,

characterized in that,

in the determination of the correction values, the control unit accesses correction values on a computer unit

that determines correction values with the aid of a computational algorithm from the relative position of the two rollers ($11, K_n$), directly involved in the printing process of an inking system (n) and the angle (α) between the connecting line (S_n) of the axes of rotation of the two rollers involved in the printing process and the axis of adjustment (BA_n).

4. Process according to one of the foregoing claims,

characterized in that

the control unit first performs a preregistration, in particular during the printing process, by evaluating the relative position of components of the print images that is plotted with optical sensors.

5. Process according to one of the foregoing claims,

characterized in that

the control unit performs, at regular intervals of time, a registration correction by evaluating the relative position of components of the print images that is plotted with optical sensors.

6. Rotary printing press with several inking systems (n)

in which a control unit adjusts the desired application line (D) of the printing plate on the material web lying on one of the two rollers by controlling the drive or drives of the two rollers ($11, K_n$) directly involved in the printing process of an inking system, so that the two rollers have, at least during a period of time, a different circumferential speed,

characterized in that

the control unit takes into account the shift (A) of the actual, effective print line on the circumference of both rollers ($11, K_n$) in the correction

that arises as a consequence of an adjustment movement of one of the two rollers involved in the printing process along an axis (BA_n) that does not run parallel to the connecting line (S_n) of the axes of rotation (M_n, M_{11}) of the two rollers involved in the printing process;

by the control unit determining correction values from the relative position of the two rollers ($11, K_n$) directly involved in the printing process of an inking system (N) and the angle (α) between the connecting line (S_n) of the axes of rotation of the two rollers involved in the printing process and the axis of adjustment (BA_n).